

From: Lawrence, Rob
Sent: Friday, January 16, 2015 9:48 AM
To: Dellinger, Philip;Overbay, Michael;Graves, Brian;Dorsey, Nancy;Bates, William
Subject: Dallas Morning News - Irving earthquake discussion

SMU seismologists discuss earthquakes with residents at Irving City Hall

By AVI Selk aselk@dallasnews.com

Staff Writer

Published: 15 January 2015 10:13 PM

Updated: 16 January 2015 08:21 AM

IRVING — If Irving is like other quake-shaken cities in North Texas, its troubles with temblors may soon be over.

But that was just one possibility seismologists laid out to hundreds of residents Thursday at City Hall. And the scientists raised less pleasant prospects for a city that's had as many earthquakes as sunrises this year.

"I do not know whether this specific swarm will die out or whether it will continue," Southern Methodist University seismologist Brian Stump told the jam-packed audience. "Experience shows that the majority of earthquake swarms do not result in damaging earthquakes. But at this time we cannot rule out the possibility of larger earthquakes, some possibly damaging."

Stump joined other researchers at the public information session — along with state, county and city officials who are looking into the earthquakes.

"We'll provide you what we know," Mayor Beth Van Duyne told the audience. "I'm going to warn you right now we have a lot more questions than answers."

At least three dozen small quakes have hit in or near Irving since April — most around the old Texas Stadium site and nearly half of them this month.

Irving joins areas such as Cleburne, Azle and Dallas/Fort Worth International Airport that have been rattled since long-dormant fault lines beneath North Texas began to wake up six years ago.

"We go back to Halloween night 2008," Stump said. "Prior to that event, there were no historic seismic events in the area."

Stump noted that Irving's cluster of quakes shares similarities with others in the area.

“All of the events since 2008 have been small,” he said. “And although startling to all of us when we feel them, they have not been large enough to cause significant damage.”

And he noted that the other swarms of quakes died out after mounting to relatively large temblors like the 3.5- and 3.6-magnitude quakes that rocked Irving last week.

But Stump — and the rest of an SMU team that has studied the quakes since 2008 — couldn’t say whether Irving’s quakes will do likewise.

They weren’t even sure where, exactly, the quakes are centered.

Stump noted that the estimated locations to date — mostly near the stadium site — could be off by miles.

“The dots on the map may not be where the earthquake has occurred,” he said.

The SMU team has placed 22 seismometers around Irving, which they hope will provide some of the best data on North Texas earthquakes.

Residents in the audience wanted to know what’s causing the quakes — and several blamed oil and gas drilling.

Stump’s team has linked fracking to other swarms of quakes in the region but pleaded for patience as Irving’s case is studied.

Another seismologist at City Hall — David Craig Pearson of the Texas Railroad Commission, which monitors oil and gas drilling — was ready to give his assessment to the audience.

Pearson noted that the only two gas wells near the quakes have been closed for years. And wastewater injection wells that have been linked to other tremors were small and far from Irving.

“The evidence points to no involvement of oil and gas activities,” he said, echoing previous statements.

Residents were skeptical, voicing suspicions about everything from gas wells to Texas Stadium’s implosion.

The mayor ended the session with most questions unanswered, but not before Dallas County Judge Clay Jenkins made a promise to the audience.

“If we find this is man-made, we’ll take steps to quickly alleviate that and stop whatever that activity is,” he said.

Rob Lawrence
Region 6
Policy Advisor - Energy Issues
214.665.6580